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Peptide T

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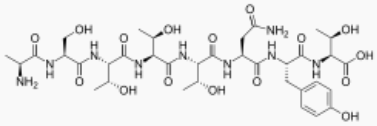
Peptide T	
	
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CUBM	
Properties	
	$C_{35}H_{55}N_9O_{16}$
	857.86 g mol^{-1}
are given for materials in their standard state (at 25 °C (77 °F), 100 kPa)	
Infobox references	

Peptide T is an HIV entry inhibitor discovered in 1986 by National Institutes of Health (NIH) researchers.[1] Peptide T, and its modified analog Dala1-peptide T-amide (DAPTA), a drug in clinical trials, is a short peptide derived from the HIV envelope protein gp120 which blocks binding[2] and infection[3] of viral strains which use the CCR5 receptor to infect cells.

Peptide T has several positive effects related to HIV disease and Neuro-AIDS.[4] A placebo-controlled, three site, 200+ patient NIH-funded clinical trial, which focused on neurocognitive improvements, was conducted between 1990 and 1995. The results showed that peptide T was not significantly different from placebo on the study primary end points. However, peptide T was associated with improved performance in the subgroup of patients with more severe cognitive impairment.[5]

A long-delayed analysis of antiviral effects from the 1996 NIH study showed peripheral viral load (combined plasma and serum) was significantly reduced in the DAPTA-treated group.[6] An eleven person study for peptide T effects on cellular viral load showed reductions in the persistently infected monocyte reservoir to undetectable levels in most of the patients.[7] Elimination of viral reservoirs, such as the monocytes, is an important treatment goal.[8] DAPTA has been shown to substantially suppress brain inflammation and block proinflammatory cytokine signaling pathways in a small animal model of Alzheimer's disease.[9]

Popular culture [edit]

Peptide T appears as an HIV/AIDS and Alzheimers treatment in the 2013 film *Dallas Buyers Club*.

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Categories: Entry inhibitors | Peptides

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